

Source Water Assessment Report



Public Water Supply: HUNTERS CLUB

Assessment Areas Include:

838



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Reports were generated with the Automated Source Water Assessment Tool (ASWAT). Assessments were completed online using ASWAT by hundreds of state employees, public water supply staff, and technical assistant providers throughout the State of Kansas.

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Report Description

Detailed Explanation of Entire Report:

The 1996 amendments to the Safe Drinking Water Act require each state to develop a Source Water Assessment Program (SWAP) and a Source Water Assessment (SWA) for each Public Water Supply (PWS) that treats and distributes raw source water. In Kansas there are 761 public water supplies that require SWAs. A SWA includes a delineation of the source water assessment area, an inventory of potential contaminant sources, and a susceptibility analysis.

A PWS can consist of one or more individual assessment areas that require different assessments. In general, an assessment area is delineated at a two-mile fixed radius for a groundwater well. A surface water intake assessment area is the upstream-drainage area (watershed), inside the state border. Additionally, an assessment area can consist of an individual well, group of wells, an individual surface water intake, or multiple surface water intakes.

After each assessment is completed a report is automatically generated using an Internet-based application called the Automated Source Water Assessment Tool (ASWAT). The individual assessment reports combine to form the entire SWA report for a PWS.

A map of each Assessment Area was also generated with ASWAT. However, for security reasons the maps are not included in this report. To obtain a copy of the map(s), please contact your local PWS.

All PWS reports will be available for viewing and downloading on KDHE's Watershed Management Section website(<http://www.kdhe.state.ks.us/nps>) in 2004.

HUNTERS CLUB Summary:

AA	Type	Diversion Id
838	Ground water single well	001

Public Water Supply: **HUNTERS CLUB**
Assessment Area: **838**
Diversion Id's: **001**
Status: **Accepted**
Submit Date: **2003-01-29 11:38:18**

Executive Summary:

The Executive Summary gives the assessment area's Susceptibility Likelihood Score (SLS) for each contaminant of concern category.

SLS indicates which contaminant category is most likely to impact a given public water supply. Contaminants of concern for groundwater include microbiological, inorganic compounds, nitrates, synthetic organic compounds, pesticides, and volatile organic compounds. Contaminants of concern for surface water include microbiological, inorganic compounds, eutrophication – phosphorus, sedimentation, synthetic organic compounds, pesticides, and volatile organic compounds.

To determine the assessment area's susceptibility to contamination, a qualitative (semi-quantitative) screening level susceptibility analysis was designed that utilizes general assumptions and best professional judgement. It is a systematic procedure comprised of simple yes/no questions. Each question in the susceptibility analysis focuses on the presence or absence of potential pollution sources in the assessment area. SLS is most useful in helping the Public Water Supply (PWS) focus on water quality protection actions towards a contaminant category of concern. For example, if the SLS for microbiological contamination is high, relative to volatile organic compounds (VOC), water supply protection planners would conclude that the attention should be directed towards microbiological contaminant sources rather than VOC sources.

Executive Summary

Public Water Supply: **HUNTERS CLUB**

Assessment Area: **838**

Susceptibility Likelihood Scores for Assessment Area

Contaminant Category	A	B	B*	C	C*	D
Susceptibility Likelihood Score – SLS	54	59	58	68	65	71
SLS Range	Mid	Mid	Mid	Mid	Mid	Mid

A – Microbiological

B* – Nitrates

C* – Pesticides

B – Inorganic Compounds

C – Synthetic Organic Compounds

D – Volatile Organic Compounds

Susceptibility Likelihood Range

SLS Range	
0–50	Low Susceptibility
51–80	Moderate Susceptibility
81–100	High Susceptibility

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Potential Sources:

The Potential Sources section lists all the sites that have been identified as potential sources of contamination.

Potential sources of contamination may include land uses, industry, or businesses that could generate or store chemicals/substances that could potentially contaminate the water supply only if released into the environment. Both unregulated sites from business location databases and regulated sites from various KDHE databases were compiled. Additional sites could have been added by an evaluator through the assessment process to supplement the original data.

The 1987 Standard Industrial Classifications (SIC) were used to identify potential contaminate sites. The SIC system classifies establishments into industries on the basis of the primary activities of the establishment.

Each assessment area is delineated with 3 assessment zones. These zones can be used to get a general understanding of the potential influence sites have based on proximity to the water supply. Zone A is a 100-foot radius around a groundwater well and a 1000-foot radius around a surface water intake. Zone B is a 2000-foot radius around wells and a hydrological delineated buffer around the surface water sources. Zone C is a 2-mile radius around wells and the balance of the watershed for intakes. The potential sources listed in this section are sorted to show all the potential sources in Zone A first, Zone B second, and Zone C third.

Although a facility or business is identified in the study as a potential concern, it does not necessarily mean a release or spill has occurred. Contamination could only occur if certain chemical substances are released into the environment and filter into the water supply source.

The data for the potential sources of contamination was compiled from May through August in 2002. Some of the databases used were incomplete datasets that are continually being updated. Due to the incompleteness, inaccuracies, and new development, it is possible that sources of potential contamination that are in the assessment area are not included in the report. Inaccurate locations could also cause sources to show up in the assessment area that are not actually in the assessment. Additionally, duplication between the datasets could cause sites to show up multiple times in the assessment area.

Potential Sources

Public Water Supply: **HUNTERS CLUB**

Assessment Area: **838**

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
138612	Bottled and Canned Soft Drinks Production	2086	B
138608	Machinery, Except Electrical Manufacturing	3599	B
138610	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	B
138611	Auto Truck Repair Service	7538	B
138319	Veterinary Services, Specialties	742	C
138637	Veterinary Services, Specialties	742	C
137774	Single-family Housing Construction	1521	C
137958	Single-family Housing Construction	1521	C
137983	Single-family Housing Construction	1521	C
137984	Single-family Housing Construction	1521	C
138004	Single-family Housing Construction	1521	C
138213	Single-family Housing Construction	1521	C
137804	Highway and Street Construction	1611	C
137805	Highway and Street Construction	1611	C
137806	Highway and Street Construction	1611	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
137807	Highway and Street Construction	1611	C
137808	Highway and Street Construction	1611	C
137991	Highway and Street Construction	1611	C
138629	Meat Packing Plant Manufacturing	2011	C
137838	Bottled and Canned Soft Drinks Production	2086	C
138184	Newspapers Publishing and Printing	2711	C
138185	Newspapers Publishing and Printing	2711	C
138037	Commercial Printing–Lithographic	2752	C
137827	Commercial Printing NEC	2759	C
138127	Commercial Printing NEC	2759	C
138119	Metal Coating and Allied Services Manufacturing	3479	C
138524	Metal Coating and Allied Services Manufacturing	3479	C
137959	Machinery, Except Electrical Manufacturing	3599	C
137998	Machinery, Except Electrical Manufacturing	3599	C
138010	Current–carrying Wiring Devices Manufacturing	3643	C
138630	Boat Building and Repairing Shop Manufacturing	3732	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
138571	Railroad Equipment Manufacturing	3743	C
137934	Local Trucking, without Storage	4212	C
137993	Farm Product Warehousing and Storage	4221	C
137989	Farm and Garden Machinery	5083	C
137986	Scrap and Waste Materials	5093	C
137903	Gasoline Service Station	5541	C
138230	Gasoline Service Station	5541	C
138249	Gasoline Service Station	5541	C
137766	Mobile Home Park	6515	C
137800	Mobile Home Park	6515	C
138566	Mobile Home Park	6515	C
138569	Mobile Home Park	6515	C
138576	Mobile Home Park	6515	C
138617	Mobile Home Park	6515	C
138619	Mobile Home Park	6515	C
138636	Mobile Home Park	6515	C
138084	Photofinishing Laboratory	7384	C
137900	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
137962	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
137966	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
138025	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
137795	Auto Truck Repair Service	7538	C
137837	Auto Truck Repair Service	7538	C
137845	Auto Truck Repair Service	7538	C
137945	Auto Truck Repair Service	7538	C
137971	Auto Truck Repair Service	7538	C
137972	Auto Truck Repair Service	7538	C
137997	Auto Truck Repair Service	7538	C
138115	Auto Truck Repair Service	7538	C
138157	Auto Truck Repair Service	7538	C
138502	Auto Truck Repair Service	7538	C
137894	Car Wash	7542	C
137990	Car Wash	7542	C
138041	Car Wash	7542	C
138521	Car Wash	7542	C
138572	Car Wash	7542	C
137773	Repair Services, Nec	7699	C
137814	Repair Services, Nec	7699	C
137831	Repair Services, Nec	7699	C
138183	Repair Services, Nec	7699	C
138627	Repair Services, Nec	7699	C

Regulated Confined Animal Feeding Operations Potential Site Sources

Did Not Contain Any Of These Potential Site Sources

Regulated Hazardous Waste Potential Site Sources

Did Not Contain Any Of These Potential Site Sources

Regulated Leaking Storage Tank Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
3000612	Pepsi Cola	06558	B
3000808	Public Wks Dept	08255	B
3001455	Mobile Traveler Industrial Park	25416	B
3000046	Town Country #69	00260	C
3000158	Taylor Petroleum #603	01896	C
3000160	4th Street Service	01908	C
3000430	Junction City Transport	05238	C
3000580	Total #2174 (vickers)	06429	C
3000695	Total #4157	06973	C
3000699	Total #1864	06979	C
3000723	B D Market	07091	C
3000732	Westwood Kwik Sak	07146	C
3000735	16th Street Service	07149	C
3001097	Jim's 66 Service	16181	C
3001139	Mckenna Auto Sales	17630	C
3001175	Riverside Standard	19365	C

Regulated Leaking Storage Tank Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
3001204	Steves Auto	20363	C
3001248	Willhoite's Inc	22869	C
3001256	Texaco, Steve's	23085	C
3001636	Meier Ready Mix	26250	C
3001647	Fina #9474, (woods Mini Mart)	26289	C
3001649	Kwik Sack #3	26293	C
3001650	Shop Quik	26294	C
3001897	United Telephone	27404	C
3001924	Goodyear Tire Co	27500	C
3002025	Jim Clark Chevrolet	28162	C
3002203	Military Sales Co	29093	C
3002342	A-one Taxi Co	29727	C
3002408	Freeman Field	40505	C
3002704	Geary Co Hwy Dept	81326	C
3002817	More Sand Co Inc	81601	C
3002818	City Ice Co	81602	C
3002828	Rr Auto Detailing Limo Service	81640	C
3002867	Bell Taxi Trans. Of Manhattan	81766	C

Regulated Identified Contaminated Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
7000751	CAMP FORSYTH FORMER LANDFILL #1	C503171146	C

Regulated Identified Contaminated Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
7000752	CAMP FORSYTH FORMER LANDFILL #2	C503171147	C
7000753	CAMP FORSYTH FORMER LANDFILL #3	C503171148	C
7000754	CAMP FORSYTH FORMER LANDFILL #4	C503171149	C
7000755	CAMP FORSYTH FORMER LANDFILL #5	C503171150	C
7000756	CAMP FORSYTH SUBSTATION (FORMER)	C503171151	C

Regulated Solid Waste Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
5000283	Pinkerton Motors, Inc.	0273-S	B

Regulated Waste Water Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
6000518	FT. RILEY (DEPT OF ARMY)	F-KS97-PO01	C
6000524	FT. RILEY (DEPT OF ARMY)	F-KS97-PO01	C
6000748	FINA OIL CHEMICAL CO.	I-LR15-PO03	C
6001421	JUNCTION CITY MWTP	M-LR15-OO01	C
6001422	JUNCTION CITY MWTP	M-LR15-OO01	C

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Added Sources:

The Added Sources section lists all the sites that have been added as potential sources of contamination by an evaluator through the assessment process to supplement the original data.

The potential sources listed in this section are sorted to show the added potential sources in Zone A first, Zone B second, and Zone C third.

Although a facility or business was added as a potential concern, it does not necessarily mean a release or spill has occurred. Contamination could only occur if certain chemical substances are released into the environment and filter into the water supply source.

Added Sources

Public Water Supply: **HUNTERS CLUB**

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Added Potential Site Sources

Source No.	Source Name	SIC ID	Zone
9000032	aboveground fuel storage tanks	10026	B
9000034		10067	B
9000590	Septic System for Jack Jill Daycare	10067	B
9000033		10075	B
9000591	Irrigated cornfield	115	B

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Potential Contaminants Summary:

The Contaminants Summary shows the number of identified unregulated sources in the assessment area for each contaminant of concern category.

In order to obtain the number of sources for each category, a relationship was correlated between each Standard Industrial Classification (SIC) and the contaminant of concern categories. Each SIC was assessed and associated with contaminant categories. For example, if not managed properly, a car wash (SIC 7542) could potentially contaminate an intake because of inorganic compounds (IOC) and volatile organic compounds (VOC); thus, a car wash is associated with IOCs and VOCs.

A chart displays a count for each contaminant category. The sum for each category represents the total number of identified sources that have been associated with that particular contaminant category. However, the total number of identified sources does not include contaminants from the Added Sources. In our example, a car wash would be considered 2 sources of contamination. It would be a potential source of contamination for IOCs and for VOCs; thus, 1 would be added to the total number of sources in the VOC category and 1 would be added to the IOC category.

Potential Contaminants Summary

Public Water Supply: **HUNTERS CLUB**

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Number of Unregulated Site Sources Identified for each Contaminant Category

MicroBiological	Pesticides	IOC's	SOC's	VOC's	Nitrates
19	0	56	11	40	15

A – Microbiological

B* – Nitrates

C* – Pesticides

B – Inorganic Compounds

C – Synthetic Organic Compounds

D – Volatile Organic Compounds

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Potential Contaminants Listing:

The Potential Contaminants section lists the contaminant of concern category associated with each Standard Industrial Classification (SIC) found in an assessment area. A complete list of contaminant category codes are located at the bottom of this page.

The relationships defined between the Standard Industrial Classifications (SIC) and the contaminant of concern categories are displayed in a table format. Using our car wash example, the relationships can be better illustrated. A car wash could release IOC and VOC chemical substances. The connection is shown by indicating the SIC, 7542, and the associated contaminant categories, IOC (Category B) and VOC (Category D). However, the contaminants listed are not associated with any Added Sources.

The list is sorted by the SIC source description and it only shows unique SIC sources. For example, an assessment area can have 20 car washes in an assessment area, but the list is only going to show contaminant categories associated with car washes onetime. This is because all car washes have the same SIC and every car wash poses the same potential threat to water intakes.

A – Microbiological **B** – Inorganic Compounds **B1** – Eutrophication – Phosphorous
B2 – Sedimentation **B*** – Nitrates **C** – Synthetic Organic Compounds
C* – Pesticides **D** – Volatile Organic Compounds

Potential Contaminants Listing

Public Water Supply: **HUNTERS CLUB**

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Unregulated Identified Site Sources and associated Potential Contaminant Category

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
7538	Auto Truck Repair Service	Inorganics, VOCs	B
"	"	"	D
3732	Boat Building and Repairing Shop Manufacturing	inorganics, VOCs	B
"	"	"	D
2086	Bottled and Canned Soft Drinks Production	BOD	A
7542	Car Wash	Inorganics, VOCs	B
"	"	"	B1
"	"	"	B2
"	"	"	D
3643	Current-carrying Wiring Devices Manufacturing	inorganics, VOCs	B
"	"	"	D
5541	Gasoline Service Station	Inorganics, VOCs	B
"	"	"	D
1611	Highway and Street Construction	Sedimentation	B2
4212	Local Trucking, without Storage	VOCs	D
3599	Machinery, Except Electrical Manufacturing	inorganics, VOCs	B
"	"	"	D

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
2011	Meat Packing Plant Manufacturing	BOD, pathogens, Oil and grease	A
"	"	"	B*
3479	Metal Coating and Allied Services Manufacturing	inorganics, VOCs	B
"	"	"	D
6515	Mobile Home Park	Sanitary wastes, Fertilizers	A
"	"	"	B
"	"	"	B1
"	"	"	B*
7384	Photofinishing Laboratory	NA	B
"	"	"	D
3743	Railroad Equipment Manufacturing	Inorganics, metals, VOCs	B
"	"	"	D
5093	Scrap and Waste Materials	Metals, TSS	B
1521	Single-family Housing Construction	Oil, Paint, Pesticides, Fertilizers	A
"	"	"	B1
"	"	"	B2
"	"	"	B*
"	"	"	C
7532	Top, Body, and Upholstery Repair Shops and Paint Shops	Inorganics, VOCs	B

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
7532	Top, Body, and Upholstery Repair Shops and Paint Shops	Inorganics, VOCs	D
742	Veterinary Services, Specialties	Sanitary, Inorganics TSS	A
"	"	"	B
2759	Commercial Printing NEC	Inorganics, VOCs, Semi volatiles	B
"	"	"	C
"	"	"	D
2752	Commercial Printing–Lithographic	Inorganics, VOCs, Semi volatiles	B
"	"	"	C
"	"	"	D
4221	Farm Product Warehousing and Storage	TSS, VOCs	B
"	"	"	D
5083	Farm and Garden Machinery	inorganics	B
2711	Newspapers Publishing and Printing	Inorganics, VOCs, Semi volatiles	B
"	"	"	C
"	"	"	D
7699	Repair Services, Nec	inorganics	B

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Protection Measures:

The Protection Measures section shows water quality protection measures for the Standard Industrial Classifications (SIC) identified in the assessment area.

Previous sections of this report are designed to show areas that Public Water Supplies (PWS) can focus on to improve the susceptibility of an assessment area. This section helps identify water quality protection measures that a PWS can use as guidance for implementing action for a potential contaminant site in the assessment area. It focuses on protection measures that can reduce the risk of contamination to the water supply.

This portion of the report only displays water quality protection measures for each type of SIC found in the assessment area. It does not display protection measures for each site in the assessment area because every SIC should have the same or similar water quality protection management practices. However, the protection measures listed are not associated with any Added Sources.

Protection Measures

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Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
7538	Auto Truck Repair Service	Inorganics, VOCs	Discharge to POTW. Manage oil products and used oil so that it is not in contact with water	40 CFR 442 and
3732	Boat Building and Repairing Shop Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct. Recycle where possible. Manage chemicals carefully	State or federal Storm water pollution prevention regulations
2086	Bottled and Canned Soft Drinks Production	BOD	Wastewater pretreatment and/or discharge to a POTW.	40 CFR 407 and State or federal Storm water pollution prevention regulations
7542	Car Wash	Inorganics, VOCs	Install and maintain sediment and grease traps where appropriate	40 CFR 442
3643	Current-carrying Wiring Devices Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	40 CFR 469 and State or federal Storm water pollution prevention regulations
5541	Gasoline Service Station	Inorganics, VOCs	Maintain area to minimize fuel contamination	NA

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
1611	Highway and Street Construction	Sedimentation	Erosion and Sediment Control	KAR 28–16, KDHE
4212	Local Trucking, without Storage	VOCs	Discharge to a POTW	State or federal Storm water pollution prevention regulations
3599	Machinery, Except Electrical Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations
2011	Meat Packing Plant Manufacturing	BOD, pathogens, Oil and grease	Wastewater pretreatment and/or discharge to a POTW	40CFR 432 and State or federal Storm water pollution prevention regulations
3479	Metal Coating and Allied Services Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	40 CFR 433 and State or federal Storm water pollution prevention regulations
6515	Mobile Home Park	Sanitary wastes, Fertilizers	Discharge to POTW. Minimize use of lawn chemicals	KAR 28–5

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
7384	Photofinishing Laboratory	NA	Discharge to POTW. Recycle chemicals	CFR 40 459
3743	Railroad Equipment Manufacturing	Inorganics, metals, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	40 CFR 464 and State or federal Storm water pollution prevention regulations
5093	Scrap and Waste Materials	Metals, TSS	Minimize contact with storm water	State or federal Storm water pollution prevention regulations
1521	Single-family Housing Construction	Oil, Paint, Pesticides, Fertilizers	Proper cleaning and disposal of household hazardous waste. Proper storage, application, and clean up of pesticides and fertilizers	KAR 28-48, KDHE, KDEM
7532	Top, Body, and Upholstery Repair Shops and Paint Shops	Inorganics, VOCs	Discharge to POTW. Recycle where appropriate. Properly maintain oil product and waste. Manage paint and solvent wastes properly	NA
742	Veterinary Services, Specialties	Sanitary, Inorganics TSS	Discharge to POT	NA

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
2759	Commercial Printing NEC	Inorganics, VOCs, Semi volatiles	Recycle chemicals where possible. Discharge to POTW	40 CFR 459 and State or federal Storm water pollution prevention regulations
2752	Commercial Printing–Lithographic	Inorganics, VOCs, Semi volatiles	Recycle chemicals where possible. Discharge to POTW	40 CFR 459 and State or federal Storm water pollution prevention regulations
4221	Farm Product Warehousing and Storage	TSS, VOCs	Keep the area clean of grain. Use grease traps.	State or federal Storm water pollution prevention regulations
5083	Farm and Garden Machinery	inorganics	Discharge to POTW	NA
2711	Newspapers Publishing and Printing	Inorganics, VOCs, Semi volatiles	Recycle chemicals where possible. Discharge to POTW	40 CFR 459 and State or federal Storm water pollution prevention regulations
7699	Repair Services, Nec	inorganics	Discharge to POTW	NA

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Assessment Analysis:

The Assessment Analysis section displays the numbers assigned to each contaminant of concern category for each question in the susceptibility analysis.

This analysis is based on a decision tree framework consisting of a series of yes/no questions. These questions consider the proximity of contaminant sources to the water supply intake, the type of contaminant, and the application of pollution prevention or water quality protection practices to sources of contamination. As the evaluator moves through the analytical framework, susceptibility points are accumulated based on the presence of contaminant sources in the assessment area.

After all the questions have been answered, the SLS is calculated for each contaminant of concern category. The SLS is determined by counting the number of contamination risk factors found to occur in the delineated assessment area and applying a multiplier to this number. Because the number of contaminant category risk factors is not equal, the multiplier is used to establish a common scale for the SLS of each contaminant category.

Assessment Analysis

Public Water Supply: **HUNTERS CLUB**

Assessment Area: **838**

Ground Water Single Well Analysis

A – Microbiological **B** – Inorganic Compounds

B* – Nitrates **C** – Synthetic Organic Compounds

C* – Pesticides **D** – Volatile Organic Compounds

No.	Question	Response	A	B	B*	C	C*	D
1	Is the well under the influence of surface water?	Yes	1	1	1	1	1	1
2	Does the well meet KS water well construction standards?	No	1	1	1	1	1	1
3	Is the depth of the well less than 30 feet?	Yes	1	1	1	1	1	1
4	Are there unplugged, abandoned water wells present in Zone A?	No	0	0	0	0	0	0
5	Is there gravel pack within 20 feet of the surface?	No	0	0	0	0	0	0
6	Does a PWS own or control Zone A?	No	1	1	1	1	1	1
7	Does Zone A consist entirely of native grass?	No	1	1	1	1	1	1
8	Is there a contaminated well in the Zone A?	No	0	0	0	0	0	0
9	Is a class V UIC well present?	No	0	0	0	0	0	0
10	Are any commercial, industrial, or urban areas present in Zone B?	Yes	1	1	1	1	1	1
11	Does each industrial/commercial site and urban area have a water quality protection plan in place?	No	1	1	1	1	1	1
12	Are any non-farm home sites present in Zone B?	Yes	1	0	1	0	1	0
13	Do all the non-farm home sites have a water quality protection plan?	No	1	0	1	0	1	0
14	Are any farmsteads present in Zone B?	Yes	1	1	1	1	1	1
15	Do all farmsteads have a water quality protection plan?	No	1	1	1	1	1	1
16	Does Zone B consist entirely of native grass?	No	1	1	1	1	1	1
17	Is there grazing livestock in Zone B?	No	0	0	0	0	0	0

No.	Question	Response	A	B	B*	C	C*	D
18	Do all the livestock producers have water quality protection measures in place?	Yes	0	0	0	0	0	0
19	Is there livestock confinement in Zone B?	No	0	0	0	0	0	0
20	Is each confined animal feeding operation registered with KDHE?	Yes	0	0	0	0	0	0
21	Is there corn or grain sorghum production in Zone B?	Yes	0	0	1	0	1	0
22	Are corn/grain sorghum nutrient and pesticide management plans in use for each site?	No	0	0	1	0	1	0
23	Are any orchards present in Zone B?	No	0	0	0	0	0	0
24	Are orchard nutrient and pesticide plans in use for each site?	Yes	0	0	0	0	0	0
25	Are there unsewered developments (concentrations of lagoons or septic systems) present in Zone B?	No	0	0	0	0	0	0
26	Is there a railroad or major highway in Zone B or C?	Yes	0	1	1	1	1	1
27	Is there oil production in Zone B or C?	No	0	0	0	0	0	0
28	Do coarse textured soils predominate Zones A, B and C?	Yes	1	1	1	1	1	1
29	Is an irrigation well located in Zone B or C?	Yes	0	1	1	1	1	1
30	Is a wastewater treatment facility in Zone B or C?	No	0	0	0	0	0	0
31	Is a solid waste landfill in Zone B or C?	No	0	0	0	0	0	0
32	Are there unplugged, abandoned water wells present in Zone B or C?	No	0	0	0	0	0	0
33	Are any commercial, industrial, or urban areas present in Zone C?	Yes	1	1	1	1	1	1
34	Are water quality protection plans in use for each site/area?	No	1	1	1	1	1	1
35	Is there livestock confinement in Zone C?	No	0	0	0	0	0	0
36	Is each confined livestock facility registered with KDHE?	Yes	0	0	0	0	0	0
37	Do all the livestock producers have water quality protection measures in place?	Yes	0	0	0	0	0	0
38	Are cropland nutrient management plans in place?	No	0	0	1	0	0	0
39	Are cropland pesticide management plans in place?	No	0	0	0	0	1	0
40	Does a perennial stream flow into Zone C?	Yes	1	1	1	1	1	1
41	Are watershed water quality protection plans in place?	No	1	1	1	1	1	1

Public Water Supply: **HUNTERS CLUB**
Assessment Area: **838**
Diversion Id's: **001**
Status: **Accepted**
Submit Date: **2003-01-29 11:38:18**

Site Comments:

The Site Comments section lists all the comments that were added for the potential sources of contamination found in the assessment area.

Local comments and feedback from people that are familiar with the assessment area is an important aspect of the assessment. The comments greatly improve the assessment by adding detail to the sites that can be referenced for more information.

This local information may include comments on potential contamination threats (or lack there of), local water quality protection initiatives, etc. Adding comments are optional and are mainly focused on sources in areas that could have the greatest impact on water supply if a spill or release occurred in the environment. It is left to the discretion of the PWS and/or source water assessment committee to add comments.

Site Comments

Public Water Supply: **HUNTERS CLUB**

Assessment Area: **838**

Comments for Unregulated Sites

Potential Contaminant Site No.	Site Comments	Author
137804	Same location as 137808, 137807, 137806, 137805 – occasional retail business now.	Dennis Taggart
137805	Same location as 137808, 137807, 137806, 137804 – occasional retail business now.	Dennis Taggart
137806	Same location as 137808, 137807, 137805, 137804 – occasional retail business now.	Dennis Taggart
137807	Same location as 137808, 137806, 137805, 137804 – occasional retail business now.	Dennis Taggart
137808	Same location as 137807, 137806, 137805, 137804 – occasional retail business now.	Dennis Taggart
138629	Not meat packing plant – coin operated laundry.	Dennis Taggart
138630	No longer sports/bait shop – used car lot now.	Dennis Taggart

Comments for Regulated Confined Animal Feeding Operations Sites

Did Not Receive Any Comments

Comments for Regulated Hazardous Waste Sites

Did Not Receive Any Comments

Comments for Regulated Leaking Storage Tank Sites

Potential Contaminant Site Name	Site No.	Site Comments	Author
Freeman Field	3002408	Storage tank removed, above ground tank installed with proper containment.	Dennis Taggart
Mobile Traveler Industrial Park	3001455	Storage tank removed, ground monitoring procedures completed.	Dennis Taggart
Public Wks Dept	3000808	Storage Tanks removed in mid-1990's	Dennis Taggart
Texaco, Steve's	3001256	Storage Tanks removed, new compliant tanks installed, ground monitoring procedures in place.	Dennis Taggart
Total #4157	3000695	Location shut down, tanks removed several years ago.	Dennis Taggart

Comments for Regulated Identified Contaminated Sites

Did Not Receive Any Comments

Comments for Regulated Solid Waste Sites

Potential Contaminant Site Name	Site No.	Site Comments	Author
Pinkerton Motors, Inc.	5000283	As per Christine Mennicke of KDHE: This was a construction materials disposal site until 1984, no activity since then.	Dennis Taggart

Comments for Regulated Waste Water Sites

Potential Contaminant Site Name	Site No.	Site Comments	Author
JUNCTION CITY MWTP	6001421	Location of wastewater plant grounds	Dennis Taggart
JUNCTION CITY MWTP	6001422	Location of wastewater plant discharge point	Dennis Taggart

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Added Site Comments:

The Added Site Comments section lists the comments for why sites were added as a potential source of contamination found to the assessment area.

Added Site Comments

Public Water Supply: **HUNTERS CLUB**

Assessment Area: **838**

Comments for Added Contaminant Sites

Added Contaminant Site Name	Site No.	Site Comments	Author
Irrigated cornfield	9000591	irrigated cropground has potential for runoff of chemicals or fertilizers	Mike Houck
Septic System for Jack Jill Daycare	9000590	private onsite wastewater system 60 ft west of well	Mike Houck
aboveground fuel storage tanks	9000032	Above ground fuel storage tanks	Mike Houck
Unknown	9000033	On-site wastewater lagoon for service station	Mike Houck
Unknown	9000034	On-site wastewater system for Bait Shop	Mike Houck

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Analysis Question Comments:

The Analysis Question Comments section lists all the comments that were added during analysis portion of the assessment, in which a series of yes/no questions were asked.

Evaluators have the option to add comments to questions to clarify why a response was given or to give more details to a question. Local comments and feedback from people that are familiar with the assessment area is an important aspect of the assessment. The comments greatly improve the assessment by adding clarification and details that could not be identified with a simple yes or no response.

Analysis Question Comments

Public Water Supply: **HUNTERS CLUB**

Assessment Area: **838**

Comments for Analysis Questions

Analysis Question	Question Comments	Author
Is the well under the influence of surface water?	alluvial aquifer, may be influenced by river flow or sand pits	Mike Houck
Does the well meet KS water well construction standards?	The ground around the well casing has settled so that runoff does not run away from well	Mike Houck
Is there gravel pack within 20 feet of the surface?	unknown	Mike Houck
Does a PWS own or control Zone A?	not all of it, there is farm ground to the north and west	Mike Houck
Do coarse textured soils predominate Zones A, B and C?	There is some sandy and gravel areas along river bottom ground	Mike Houck
Are there unplugged, abandoned water wells present in Zone B or C?	unknown	Mike Houck
Does a perennial stream flow into Zone C?	Republican River	Mike Houck
N/A or Unknown	This site is no longer named the Hunters Club, it is the Jack Jill Daycare facility	Mike Houck